1, 2-dimethoxyethane - Comments of Environmental Defense

(Submitted via Internet 6/14/02)

Environmental Defense appreciates this opportunity to submit comments on the robust summary/test plan for 1,2-dimethoxyethane (CAS # 110-71-4).

The Robust Summary/Test Plan for 1,2-dimethoxyethane (monoglyme) is generally a complete and well-prepared document. The writing is clear and concise. The Test Plan makes effective use of experimental and computer model results for monoglyme and effectively extrapolates data from studies with closely related chemicals to predict possible hazards associated with exposure to monoglyme. Robust Summaries of available data are clearly presented and when hazards are predicted for this or related compounds, this document does not minimize the risks. Most notably, the Test Plan describes the metabolism of monoglyme to its primary metabolite 2-methoxyacetic acid and draws on literature data for this and related compounds to predict significant reproductive and developmental toxicity. Comments on this Robust Summary/Test Plan are limited to the following:

1. The Robust Summary/Test Plan does not contain data on human exposure or toxicity and does not fully address possible routes of human exposure. While such information is not technically required under the terms of the HPV challenge, its inclusion is very helpful.

2. It should probably mentioned under the heading of human health hazards that this chemical may form explosive peroxides on exposure to air and light. (Bretherick, L. Ed. Hazards in the Chemical Laboratory, 4th Ed. The Royal Society of Chemistry, London. 1986 pp. 300-301.).

3. Due to the fact that monoglyme is relatively nontoxic and is missible with water, environmental contamination is unlikely to become a problem unless contamination results from prolonged release or a spill. However, since monoglyme is very slowly degraded in the environment, such a scenario should be addressed.

Note:
The Robust Summary/Test Plan posted on the EPA HPV web site has significant bugs that prevent or hinder printing, and significant data in both the Test Plan and Robust Summary are not readable due to bugs in the document. It is not clear whether the problem is intrinsic to the Robust Summary/Test Plan as submitted, or whether this problem arose at the time the documents were posted to EPA' web site. In either event, this problem should be addressed by EPA.

Thank you for this opportunity to comment.

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